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#### UNITED STATES PATENT AND TRADEMARK OFFICE

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#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte DONALD E. WHEATLEY and TODD JACKSON

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Appeal 2019-006600 Application 12/212,151 Technology Center 3600

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Before STEFAN STAICOVICI, LEE L. STEPINA, and ERIC C. JESCHKE, *Administrative Patent Judges*.

STAICOVICI, Administrative Patent Judge.

## DECISION ON APPEAL<sup>1</sup>

#### STATEMENT OF THE CASE

Appellant<sup>2</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's decision in the Final Office Action (dated Dec. 19, 2017, hereinafter "Final Act.") rejecting claims 6–15, 17–20, and 24–27.<sup>3</sup> Appellant's representative

<sup>&</sup>lt;sup>1</sup> This is Appellant's second appeal before the Patent Trial and Appeal Board. In the first appeal (2014-004773, Decision mailed July 5, 2016, hereinafter "Decision"), the rejection under 35 U.S.C. § 102(b) of claims 11–13, 19, and 20 was reversed and the rejections under 35 U.S.C. § 103(a) of claims 11–15 and 17–20 were affirmed. Decision 10–11.

<sup>&</sup>lt;sup>2</sup> We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Fortress Stabilization Systems is identified as the real party in interest in Appellant's Appeal Brief (filed Apr. 18, 2018, hereinafter "Appeal Br."). Appeal Br. 2.

<sup>&</sup>lt;sup>3</sup> Claims 1–5, 16, and 21–23 are canceled. Final Act. 2.

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presented oral argument on September 1, 2020. We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

#### SUMMARY OF DECISION

We REVERSE.

#### **INVENTION**

Appellant's invention is directed "to a system and method for wall reinforcement." Spec. para. 2.

Claims 6, 11, and 20 are independent. Claim 6 is illustrative of the claimed invention and reads as follows:

6. A structure, comprising:

a concrete block wall;

a support member formed from lumber and supported on top of said concrete block wall and disposed above said concrete block wall;

a bracket having a base portion secured directly to said support member by at least one fastener at a location above said concrete block wall and including a strap support portion connected to said base portion, wherein the bracket is disposed above said concrete block wall; and

a flexible strap having a length dimension and a width dimension, said length dimension being greater than said width dimension, said flexible strap including first and second end portions along said length dimension and an intermediate portion disposed between said first and second end portions along said length dimension, said intermediate portion being wrapped directly around said strap support portion at a location above the concrete block wall, at least one of said first and second end portions being secured to an inside face of said concrete block wall by an adhesive.

#### **REJECTIONS**

- I. The Examiner rejects claims 6–9, 11–14, 17–20, and 24–27 under 35 U.S.C. § 103(a) as being unpatentable over Morton<sup>4</sup> and Platts.<sup>5</sup>
- II. The Examiner rejects claims 10 and 15 under 35 U.S.C.
  § 103(a) as being unpatentable over Morton, Platts, and
  Swallow.<sup>6</sup>

#### **ANALYSIS**

## Rejection I

The Examiner finds Morton's embodiment illustrated in Figures 20 and 21 includes, *inter alia*, a concrete block wall constructed from concrete blocks B, a support member formed by joists 304 and wooden blocks, a bracket 300 secured by bolts to the support member, and a pre-cured reinforcing strap (plate) 302 secured to an inside face of blocks B by an adhesive. Final Act. 3–4 (citing Morton, col. 8, ll. 10–13, 26–38, Figs. 20, 21). The Examiner further finds that Morton discloses the use of flexible fabric straps 221, 223, 225, and, in particular, discloses the use of in-situ composite reinforcing members as an alternative to pre-cured reinforcing plates 302 of the embodiment illustrated in Figures 20 and 21. *Id.* at 4–5 (citing Morton, col. 10, ll. 39–47; Decision 5–6); *see also* Morton, col. 17, ll. 1–7, 38–44, 61–67, Figs. 15, 16. Thus, the Examiner determines that it would have been obvious for a skilled artisan to replace reinforcing strap

<sup>&</sup>lt;sup>4</sup> Morton, US 6,418,684 B1, issued July 16, 2002.

<sup>&</sup>lt;sup>5</sup> Platts, US 2006/0254193 A1, published Nov. 16, 2006.

<sup>&</sup>lt;sup>6</sup> Swallow, US 5,820,958, issued Oct. 13, 1998.

- (plate) 302 of Morton's embodiment illustrated in Figures 20 and 21 with a flexible strap fiber composite strap because:
- (1) Morton discloses the use of in-situ composite reinforcing members as an *alternative* to pre-cured reinforcing plate 302;
- (2) transporting flexible reinforcing members to the job site is easier; and
- (3) choosing a material based on its suitability for an intended use is an obvious matter of design choice. *Id.* (citing *In re Leshin*, 277 F.2d 197, 199 (CCPA 1960)).

The Examiner further finds that although Morton does not disclose wrapping the strap "directly around" a strap support portion of a bracket, nonetheless, Morton "does disclose that alternat[ive] connectors could be used in place of bracket #300." *Id.* at 5 (citing Morton, col. 8, ll. 6–25). As an illustration of such an "alternat[ive] connector," the Examiner turns to Platts' bracket 44, for attaching strap 30 to frame member 16 above wall 24, by looping strap 30 through slot 46 and around pin element 36. *Id.*; *see also* Platts, Figs. 1, 2. Thus, the Examiner concludes that

it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used a bracket which comprises of an elongate aperture within the strap support portion, as taught in Platts, within the invention of Morton such that an intermediate portion of the strap of Morton is received within the aperture and is directly wrapped around the strap support portion in order to provide a stronger connection between the floor joist of the structure and the flexible strap being used, where such a *substitution* of one bracket for another would have yielded predictable results of securing a reinforcing strap to a support member.

Id. at 6 (emphasis added) (citing KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)).

Appellant argues that the Examiner's "modification of Morton in view of Platts requires a modification of the reinforcing plate 302 to be a flexible strap and a modification of the connector 300" to be replaced by Platts' bracket 44 and pin 36 "to receive the flexible strap," and, thus, the "modifications change the structure, function and principle of operation of the system of Morton." Appeal Br. 10–11. Appellant contends that because the Examiner's rejection "replac[es] the fabric members of Figure[] 16 for the plates 302 of Figure 20 [of] Morton . . . and further modif[ies] the connector 300 with the bracket [44 and pin 36] of Platts," the resulting system of Morton, as modified by Platts, "modifies every element of the system 300, 302 of Morton . . . beyond recognition." Reply Brief (filed Sept. 5, 2019, hereinafter "Reply Br.") 15. Thus, according to Appellant, "the system of Morton as modified by the Examiner [according to Platts] has no remaining resemblance to the disclosure of Morton," and, therefore, the Examiner's rejection "relies upon impermissible hindsight." Appeal Br. 11; Reply Br. 15.

In response, the Examiner takes the position that "[t]he rejections based on Morton in view of Platts . . . use the same type of modifications and same reasoning . . . to meet each and every feature of the claimed invention that were similarly used in Appeal 2014-004773 and Affirmed by the Board in the Decision." Examiner's Answer (dated July 19, 2019, hereinafter "Ans.") 4. In particular, the Examiner notes that the instant rejection

only replaces the connection bracket [of] secondary reference of Oliv[]er<sup>7</sup> with that of the connection bracket [of] secondary reference of Platts, where the . . . [resulting] structures of Morton in view of Oliv[]er and Morton in view of Platts would each comprise of a flexible strap which comprises of a looped portion that engages a bracket.

*Id.* at 8. Thus, according to the Examiner, because in the instant rejection "the same modifications . . . are provided *again* using the structure and placement of the bracket of Platts as the secondary reference instead of Oliv[]er, the Board decision must be applied to the present rejection[]." *Id.* at 9 (emphasis added).

We do not agree with the Examiner's position that "Appellant is reiterating the *same* arguments as were provided in Appeal 2014-004773, which the Board has already ruled upon and deemed unpersuasive." Ans. 4 (emphasis added). In particular, the arguments noted above were not presented in Appeal No. 2014-004773, and, thus, the Board could not have considered them. *See* Decision 7–10. Accordingly, in light of Appellant's newly presented arguments and evidence in the form of a Declaration filed under 37 C.F.R. § 1.132 by Richard E. Prince, PE (filed Jan. 31, 2018, hereinafter "Prince Decl."), we find the Examiner's rejection untenable for the following reasons.

In particular, Morton discloses a wall reinforcing system and method for strengthening *subterranean* walls to resist *lateral* forces using connector 300 (bracket) seated against pre-cured plates 302 or, in the alternative, in situ formed fiber reinforced straps, which are adhesively bonded to the inside surface of the wall. Morton, Abstract, col. 2, 11. 62–65, col. 3, 11. 1–8,

<sup>&</sup>lt;sup>7</sup> Oliver et al., US 6,725,613 B2, issued Apr. 27, 2004.

46–54, col. 8, ll. 10–16, 30–32, col. 10, ll. 40–47 ("In addition to the use of pre-cured reinforcing members, such as pre-cured plates [302], it is also contemplated that reinforcing members can be formed in situ . . . by combining reinforcing fibers with an uncured polymer."), Figs. 20, 21; Prince Decl. para. 8. In contrast, Platts discloses a system and method for reinforcing roof frame structure to resist windstorm *uplift* (vertical) forces using metallic connector 30 (strap) having an upper end 34 looped through slot 46 and over pin 36 of load distribution plate 44 (bracket). Platts, Abstract, paras. 10, 24, 26, Fig. 2; Prince Decl. para. 13. In other words, Morton's connector 300 (bracket) is employed in combination with in situ formed fiber reinforced straps to resist *lateral* forces acting on vertical subterranean walls, whereas Platts' slotted bracket 44 is used in combination with pin 36 and a metallic connector 30 to generate a downward force to resist windstorm *uplift* (vertical) forces acting on a *roof* structure. Compare Morton, Fig. 1 (lateral force exerted by earth E), with Platts, Fig. 2 (restraining force 62a resists uplift vertical force 60). We, thus, agree with Appellant that the connector 300 of Morton and the bracket assembly formed by bracket 44 and pin 36 of Platts "operate in entirely different ways, resist different forces, and perform different functions." Prince Decl. para. 15; see also Appeal Br. 13; Reply Br. 17.

As such, in light of the different operational features of Morton's connector 300 (bracket) and Platts' bracket assembly 44, 36, it is not clear from the Examiner's rejection why a person of ordinary skill in the art would replace Morton's connector 300 with Platts' bracket assembly 44, 36. Just because the Examiner's rejection demonstrates that Morton's connector 300 and Platts' bracket assembly 44, 36 are known in the prior art and can be

substituted for one another, is not, in itself, a reason to combine the teachings of Morton and Platts. Rather, an obviousness rejection must further explain the reasoning by which those findings support the Examiner's conclusion of obviousness. *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1328–30 (Fed. Cir. 2009). Here, the Examiner's conclusion that the substitution of Platts' bracket assembly 44, 36 for Morton's connector 300 "would have yielded predictable results of securing a reinforcing strap to a support member" says essentially that the substitution would have been obvious because Platts' bracket assembly 44, 36 was merely a known element to secure a strap. *See* Final Act. 6.

In addition, the Examiner's rejection fails to adequately explain why a skilled artisan would substitute Platts' bracket assembly 44, 36 for Morton's connector 300 in order to achieve a "stronger connection between a floor joist of the structure and the flexible strap being used." See id. (emphasis added). In particular, the Examiner does not sufficiently explain why a skilled artisan would desire a "stronger connection" between Morton's joists 304 and in situ formed fiber reinforced straps. The Examiner has not provided any findings that Morton recognized a problem with seating connector 300 against the upper end of the in situ formed fiber reinforced straps and holding them tightly against the wall in order to resist lateral loads. As discussed supra, Platts' bracket assembly 44, 36 generates a downward restraining force 62a; however, the Examiner has not provided any findings that Morton recognized a problem with uplift *vertical* forces that would require generating a downward restraining force, as per wrapping Morton's in situ formed fiber reinforced straps around pin 36 of Platts' bracket assembly 44, 36 to generate a restraining force 62a. See Platts, Fig.

2; see also Prince Decl. para. 10 (describing Appellant's invention as increasing the downward load on a concrete block wall). Moreover, the Examiner does not sufficiently explain how a skilled artisan would fix Platts' pin 36 and bracket 44 to Morton's joists 304 such that Morton's in situ formed fiber reinforced straps would wrap around Platts' pin 36 and pass through slot 46 of bracket 44.

In conclusion, the Examiner's rejection is not a mere substitution of one bracket for another in *similar* applications, and, thus, does not constitute an obvious selection between indisputably known bracket alternatives and the application of routine technical skills. *See KSR*, 550 U.S. at 417. We, thus, agree with Appellant that the Examiner's "modification of the connector 300 of Morton to the complex connector {26, 44, 46, 36} of Platts is not rational." Appeal Br. 12.

Accordingly, for the foregoing reasons, we do not sustain the rejection under 35 U.S.C. § 103(a) of claims 6–9, 11–14, 17–20, and 24–27 as unpatentable over Morton and Platts.

## Rejection II

The Examiner's use of the Swallow disclosure does not remedy the deficiency of the Morton and Platts combination discussed *supra*. *See* Final Act. 18–19. Therefore, for the same reasons discussed above, we also do not sustain the rejection of claims 10 and 15 over the combined teachings of Morton, Platts, and Swallow.

## CONCLUSION

Claim(s)	35 U.S.C. §	Reference(s)/	Affirmed	Reversed
Rejected		Basis		
6–9, 11–14,	103(a)	Morton,		6–9, 11–14,
17–20, 24–27		Platts		17–20, 24–27
10, 15	103(a)	Morton,		10, 15
		Platts,		
		Swallow		
Overall				6–15, 17–20,
Outcome				24–27

# REVERSED